ICOM

VHF AND UHF MOBILE TRANSCEIVERS

IC-F1020 (45 W 136–174 MHz)
IC-F2020 (35 W 400–512 MHz)



The photo shows actual size.

● Rugged construction
The diecast aluminum chassis and polycarbonate front panel are resistant to impact.

● 45 W* of stable output power
The one-piece aluminum chassis and heat sink provide effective heat dissipation, even at high duty cycles.
* 45 W for the IC-F1020 (VHF) and 35 W for the IC-F2020 (UHF).

● Detachable front panel*
A detachable front panel provides numerous mounting possibilities and is simple to install in almost any vehicle.
* Optional remote kit and cable lengths available.

● Programmable assign function
Six switches provide simple operation yet their functions can be changed during programming, providing flexibility to suit your specific needs. (Limited front panel programming available.)

● 9600 baud data compatible

● CTCSS and DTCSS are standard

● Large, alphanumeric display

● 32 channels standard; up to 160 optional





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ADDITIONAL FEATURES

- Selectable transmit power (by channel)
- Memo banks
- Emergency call (DTMF code) with single or repeat function
- Tones + group code channels for 2-tone decode (optional)
- Automatic DTMF transmission linked to PTT
- Standard CTCSS with 51 frequencies (plus 1 programmable)
- Standard DTCS with selectable polarity
- 7 DTMF channels for auto-dialing
- Up to 8 alphanumeric characters for memory name display
- 5 scan channel groups
- 2 priority channels
- Scan start and/or tone squelch as the microphone on hook function
- Priority channel selection and/or receive monitor as the microphone off hook function
- Normal scan and priority scan
- Power ON scan start
- Reverse burst equivalent
- Transpond capability (optional 2-tone decoder unit necessary)
- Programmable password security
- Programmable minimum level for audio volume
- Talk around function
- Time-out timer with penalty time
- Transmit lockout (CTCSS/channel busy)
- 2 selectable 'stun' functions (optional 2-tone decoder unit necessary)
- External I/O terminal socket (optional OPC-617 required) for PA, horn honk, dimmer, 9600 baud packet and PTT
- Advanced programming package for IBM®PC or compatible

®IBM is a registered trademark of International Business Machines.

SPECIFICATIONS

GENERAL

- Frequency coverage
  - IC-F1020 : 136–155 MHz #01; 146–174 MHz #02
  - IC-F2020 : 400–430 MHz #01; 450–470 MHz #02; 470–490 MHz #03; 490–512 MHz #04
- Mode : 16K0F3E
- Number of channels : 32 (standard), 160 (optional)
- Channel spacing : 25 kHz and 30 kHz
- Power supply requirement : 13.6 V DC ±15% (negative ground)
- Current drain (at 13.6 V DC; typical)
  - High 9 A (IC-F1020) 8 A (IC-F2020)
  - Low 4 A (IC-F1020) 4 A (IC-F2020)
  - Squelched 700 mA
  - Max. audio output 1.2 A
- Usable temperature range : –30°C to +60°C; –22°F to +140°F
- Frequency stability : ±5 ppm
- Dimensions (proj. not included) : 150(W) x 50(H) x 180(D) mm; $5\frac{29}{32}$ x $1\frac{31}{32}$(H) x $7\frac{3}{32}$(D) in
- Weight : 1.5 kg; 3 lb 5 oz

TRANSMITTER

- Output power
  - IC-F1020 High 45 W; Low 4.5 W
  - IC-F2020 High 35 W; Low 2 W
- Max. frequency deviation : ±5.0 kHz
- Spurious emissions : 70 dB min.
- Harmonic emissions : 70 dB min.
- Hum and noise : 45 dB typ. (IC-F1020); 45 dB typ. (IC-F2020)

RECEIVER

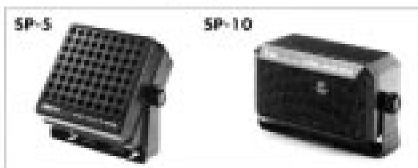
- Sensitivity for 12 dB SINAD (typical)
  - IC-F1020 : 0.21 μV
  - IC-F2020 : 0.25 μV
- Squelch sensitivity
  - IC-F1020 : 0.21 μV
  - IC-F2020 : 0.25 μV
- Adj. channel selectivity : 75 dB typ.
- Intermodulation rejection : 70 dB min.
- Spurious response rejection : 70 dB min.
- Hum and noise (typical)
  - IC-F1020 : –50 dB
  - IC-F2020 : –45 dB
- Audio output power : 4 W typ. at 10% distortion with a 4 Ω load

Measurements made in accordance with EIA/TIA-240D, EIA/TIA-316C.
All stated specifications are subject to change without notice or obligation.

OPTIONS

- **EX-1761** MEMORY EXPANSION UNIT
  Expands memory channels to 160 from 32.
- **OPC-617** ACC CABLE
  For external terminal connection.
- **RMK-1** SEPARATION KIT
  For front panel detachment installation. One of the following 3 cables must be used with this kit: OPC-607 (3 m), OPC-608 (8 m) or OPC-609 (1.9 m).
- **SP-5** EXTERNAL SPEAKER
  Large speaker for excellent audio quality.
  Input impedance: 4 Ω; Max. input power: 5 W.
- **SP-10** EXTERNAL SPEAKER
  Compact and easy-to-install.
  Input impedance: 4 Ω; Max. input power: 5 W.
- **UT-80** 2-TONE UNIT
  Provides 2-tone decoder capability.
- **UT-96** 5-TONE UNIT
  Provides 5-tone decoder capabilities as well as 2-tone decoder capabilities via PC programming.
- **EX-1764/OPC-472/OPC-592** FIELD PROGRAMMING SOFTWARE AND CLONING CABLES FOR DEALERS ONLY
- **OPC-591** CLONING CABLE
  For cloning between transceivers (dealers only).







Icom Inc. 6-9-16, Kamihigashi, Hirano-ku, Osaka 547, Japan Phone: 06 793 5302 Fax: 06 793 0013 Telex: 05277822 ICOMTR J

Count on us!

Icom America Inc.
(Corporate Headquarters)
2380 116th Avenue N.E., Bellevue, WA 98004, U.S.A.
Phone : (206) 454-8155 Fax : (206) 454-1509
Telex : 152210 ICOM AMER BVUE
(Customer Service)
Phone : (206) 454-7619
(Regional Customer Service Center)
18102 Sky Park South, Suite 52-B, Irvine, CA 92714, U.S.A.
Phone : (714) 852-8026 Fax : (714) 852-8716

Icom Canada
A Division of Icom America Inc.
3071 #5 Road, Unit 9, Richmond, B.C., V6X 2T4, Canada
Phone : (604) 273-7400 Fax : (604) 273-1900

Icom (Europe) GmbH
Communication Equipment
Himmelgeister Str. 100, D-40225 Düsseldorf, Germany
Phone : 0211 346047 Fax : 0211 333639

Icom (Australia) Pty. Ltd.
A.C.N 006 092 575
7 Duke Street, Windsor, Victoria, 3181, Australia
Phone : 03 9529 7582 Fax : 03 9529 8485

Icom (UK) Ltd.
Unit 9, Sea St., Herne Bay, Kent, CT6 8LD, U.K.
Phone : 01227 741741 Fax : 01227 741742
Telex : 965179 ICOM G

Icom France S.a
Zac de la Plaine, Rue Brindejonc des Moulinais
BP 5804, 31505 Toulouse Cedex, France
Phone : 61. 36. 03. 03 Fax : 61. 36. 03. 00
Telex : 521515 ICOM FRA

Your local distributor/dealer:

Printed in Japan